

## BREEDING BIOLOGY OF RED-VENTED BULBUL (*PYCNONOTUS CAFER*)

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### ABSTRACT

The pair formation in red-vented bulbul (*Pycnonotus cafer*) in Haryana starts in the month of March. This is followed by selection of nest building site by the pair and both the partners actively participate in nest building activity. Bulbul prefers the nest building at a height of 1.5 to 3.25 meters. The clutch size varied from two to three eggs and female hatches them for nine to twelve days. The nestling period was approximately of 14 days. Breeding success was moderate because of predation by cats, squirrels, shikra, owlets etc. Both the parents care their young fledglings, feed them and train them for escaping predation and flying.

**KEYWORDS:** Red-Vented Bulbul, Nest Ecology, Breeding Strategy

### INTRODUCTION

The red vented bulbul is a common resident bird of North India. The description of this beautiful bird is given in numerous books of English and local ethnic literature. However, scientific study on such a common bird of subtropic Shivalic range has not been made till date. The generalized information, on shape, size, color of eggs etc. has been described by various workers (Vijayan 1980, Baker 1932, Ali and Ripley 1971). Information of pair formation and behavior of bulbul has been documented (Dixit 1963, Lamba 1968, Prajapati 2006). The detailed information on reproductive behavior and breeding of bulbul has been elaborately described by Prajapati *et.al.* 2011 from Gujrat till date to the best of author's knowledge no information has been generated from Haryana.

### MATERIAL AND METHODS

Systematic study on pair formation, nest building, hatching and brood rearing has been made during three breeding seasons 2010 to 2012, from Kurukshetra University Campus, Kurukshetra (29.965°N, 76.837°E). The behavioural activity pattern and morphometric data on different parameters have been recorded.

### RESULTS AND DISCUSSIONS

The pair formation in bulbul starts in the month of March, breeding season lasts from March to May. It is female that selects the male; nest building is done by both the partners. The site of nest selection is a joint venture. Mostly nests are built on bushes and small tree human habitations. On pair made its nest on bicycle handle near bell, and was predated upon twice in first two seasons. In the subsequent breeding season author provided artificial site for nest building, along with old as well as new nest on it, the same was never accepted by the pair. However, in the vicinity the same pair built the nest at a height of 1.5 meters on a ventilator.

This pair used fine twigs of herbs and grasses for building nest. The plants preferred for nest building included *Zizipus*, *Hibiscus*, *Citrus*, *Acacia*, etc. At several occasions nests were observed near the electricity boxes and meshwork of wires. Prajapati (2011) has reported nests on bushes. The selection of new nesting sites probably indicates its behavioural

adaptations with human habitations. The eggs were off white in color with light purplish brown blotches on them. The eggs varied from 18.2 – 21.5 mm in length and 15.2 -17.3 mm in width. These morphometric details of the egg dimensions were similar to those reported earlier by Ali and Ripley, 1971 and Prajapati *et.al.* 2011.

The clutch size varied from 2-3 eggs, similar observations were made by earlier workers who have related the clutch size with the availability of food resources (Vijayan, 1980; and Prajapati, *et. al.*2011). During breeding seasons (2010 & 2011), the nests built on bicycle handle were predated by cats. It may be the reason that clutches size reduction has evolved as an adaptive advantage to combat nest predation (Roff, 1992).

Hatching period varied between 9-12 days in *P. cafer* and nestling period was approximately of 14 days. These observations are similar to that of Ali and Ripley, 1971 and Prajapati *et.al.* 2011. The variations in incubation and nestling period depends upon the number of young ones in brood, availability of food, nest height and age of parents (Dhanda and Dhindsa, 1998). Temperature and photoperiod also influence the duration of nestling period (Patel, 1986).

Hatching success has been recorded to be moderate due to extensive losses of fledgling due to adverse weather conditions like rainfall and wind. During our observation, it has been recorded that squirrels, owlets, cats and stray dogs were the common. Similar predators have been recorded by Prajapati *et.al.* 2011.

Parents care their fledglings, feed them and train them for escaping predation and flying to the safer places. Some fledglings return to their nests in the evening while others visit occasionally. It was also observed during the present studies that the same pairs prefer to rebuild their nest on the previous site; sometimes they repair and reuse the same nest.



**Figure 1: Pair of Bulbul at the Roosting Site near the Nest Building Area during the Courtship Days**



**Figure 2: Nest Containing Two Eggs Laid by the Bulbul**



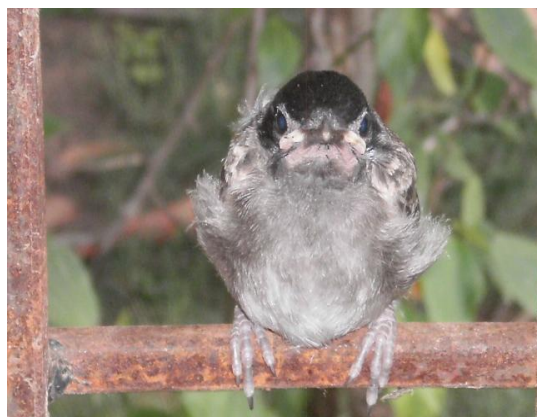
**Figure 3: Female Bulbul Hatching the Clutch of Laid Eggs**



**Figure 4: The Bulbul Feeding the Nestlings**



**Figure 5: Three Precocious Hatchlings of the Bulbul**



**Figure 6: The Fledgling Out of the Nest for the Maiden Flight**

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